

## WEST Search History

DATE: Wednesday, August 16, 2006

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L35	L5 and L34	42
<input type="checkbox"/>	L34	L22 and L33	50
<input type="checkbox"/>	L33	mitsui.as.	103595
		<i>DB=PGPB,USPT,USOC; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L32	L22 and L31	1
<input type="checkbox"/>	L31	(156/329).ccls.	664
<input type="checkbox"/>	L28	L22 and L27	83
<input type="checkbox"/>	L27	(525/393,396,474).ccls.	1873
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L26	L23 and L25	202
<input type="checkbox"/>	L25	Epoxy near5 resin	283085
<input type="checkbox"/>	L24	L21 and L23	17
<input type="checkbox"/>	L23	L5 same L22	318
<input type="checkbox"/>	L22	L4 or L17	2660
<input type="checkbox"/>	L21	L9 with L20	2696
<input type="checkbox"/>	L20	anhydride or dianhydride	372827
<input type="checkbox"/>	L19	L12 or L15	4104
<input type="checkbox"/>	L18	L5 same L17	43
<input type="checkbox"/>	L17	Bis! With aminophenoxy with phenoxy with benzene	164
<input type="checkbox"/>	L16	L7 and L15	3
<input type="checkbox"/>	L15	L9 with L14	1086
<input type="checkbox"/>	L14	aminoalkyl	37523
<input type="checkbox"/>	L13	L7 and L12	26
<input type="checkbox"/>	L12	L8 with L9	4104
<input type="checkbox"/>	L11	L7 and L10	8
<input type="checkbox"/>	L10	L8 near3 L9	2195
<input type="checkbox"/>	L9	silicon\$1 adj (polymer or oil or elastomer or fluid) or polysiloxane or polyorganosiloxane or organopolysiloxane or polydiorganosiloxane or diorganopolysiloxane or poly! adj oxy! adj dimethylsilylene or polyoxydimethylsilylene or PDMS or polydimethylsiloxane or poly! Adj	197352

	dimethylsiloxane	
<input type="checkbox"/>	L8 aminofunction\$2 or ((amine or amino) adj function\$2) or aminoalkyl or diamine	214153
<input type="checkbox"/>	L7 L1 same L5	5656
<input type="checkbox"/>	L6 L4 same L5	275
<input type="checkbox"/>	L5 polyimide	169395
<input type="checkbox"/>	L4 L1 with L3	2496
<input type="checkbox"/>	L3 Amine or amino	1116309
<input type="checkbox"/>	L2 Amine or amino	1116309
<input type="checkbox"/>	L1 (Polyphenylene or polyarylene) adj (oxide or ether)	32125

END OF SEARCH HISTORY

10/512, 064

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 15 AUG 2006 HIGHEST RN 901654-60-2  
DICTIONARY FILE UPDATES: 15 AUG 2006 HIGHEST RN 901654-60-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

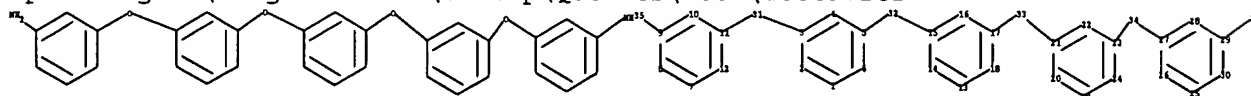
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\2064\2064a.str



chain nodes :

31 32 33 34 35 36

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23  
24 25 26 27 28 29 30

chain bonds :

3-31 5-32 9-35 11-31 15-32 17-33 21-33 23-34 27-34 29-36

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15

15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27  
27-28 28-29

29-30

exact/norm bonds :

3-31 5-32 9-35 11-31 15-32 17-33 21-33 23-34 27-34 29-36

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15

15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27  
27-28 28-29

29-30

isolated ring systems :

containing 1 : 7 : 13 : 19 : 25 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom 21:Atom  
22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom  
31:CLASS 32:CLASS

33:CLASS 34:CLASS 35:CLASS 36:CLASS

L1 STRUCTURE UPLOADED

=> s l1 sss full  
FULL SEARCH INITIATED 18:02:23 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17202 TO ITERATE

100.0% PROCESSED 17202 ITERATIONS 36 ANSWERS  
SEARCH TIME: 00.00.01

L2 36 SEA SSS FUL L1

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 166.94 167.15

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 16 Aug 2006 VOL 145 ISS 8  
FILE LAST UPDATED: 15 Aug 2006 (20060815/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l2  
L3 37 L2

=> s Polyimide  
54472 POLYIMIDE  
62485 POLYIMIDES  
L4 68951 POLYIMIDE  
(POLYIMIDE OR POLYIMIDES)

=> s l3 (L) L4  
L5 24 L3 (L) L4

=> s epoxy  
232166 EPOXY  
2558 EPOXIES  
L6 232490 EPOXY  
(EPOXY OR EPOXIES)

=> s aminofunction2 or ((amine or amino) adj function2) or aminoalkyl or diamine  
2) IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s aminofunction## or ((amine or amino) (w) function##) or aminoalkyl or diamine

134 AMINOFUNCTION##  
269016 AMINE  
250781 AMINES  
410081 AMINE  
(AMINE OR AMINES)  
1081668 AMINO  
43 AMINOS  
1081685 AMINO  
(AMINO OR AMINOS)  
2109893 FUNCTION##  
3247 (AMINE OR AMINO) (W) FUNCTION##  
11795 AMINOALKYL  
11 AMINOALKYLS  
11802 AMINOALKYL  
(AMINOALKYL OR AMINOALKYLS)  
45413 DIAMINE  
27163 DIAMINES  
62254 DIAMINE  
(DIAMINE OR DIAMINES)

L7 76751 AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINOALKYL OR DIAMINE.

=> s silicon# (w) (polymer or oil or elastomer or fluid) or polysiloxane or polyorganosiloxane or organopolysiloxane or polydiorganosiloxane or diorganopolysiloxane or poly (w) oxy (w) dimethylsilylene or polyoxydimethylsilylene or PDMS or polydimethylsiloxane or poly (w) dimethylsiloxane

874858 SILICON#  
1078889 POLYMER  
879468 POLYMERS  
1455234 POLYMER  
(POLYMER OR POLYMERS)  
743923 OIL  
357374 OILS  
840327 OIL  
(OIL OR OILS)  
40447 ELASTOMER  
33921 ELASTOMERS  
58970 ELASTOMER  
(ELASTOMER OR ELASTOMERS)  
410989 FLUID  
175539 FLUIDS  
496940 FLUID  
(FLUID OR FLUIDS)  
24813 SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID)  
30782 POLYSILOXANE  
65865 POLYSILOXANES  
74937 POLYSILOXANE  
(POLYSILOXANE OR POLYSILOXANES)  
2115 POLYORGANOSILOXANE  
1391 POLYORGANOSILOXANES  
3014 POLYORGANOSILOXANE  
(POLYORGANOSILOXANE OR POLYORGANOSILOXANES)  
3780 ORGANOPOLYSILOXANE  
2483 ORGANOPOLYSILOXANES  
5325 ORGANOPOLYSILOXANE  
(ORGANOPOLYSILOXANE OR ORGANOPOLYSILOXANES)

398 POLYDIORGANOSILOXANE  
 220 POLYDIORGANOSILOXANES  
 570 POLYDIORGANOSILOXANE  
      (POLYDIORGANOSILOXANE OR POLYDIORGANOSILOXANES)  
 421 DIORGANOPOLYSILOXANE  
 321 DIORGANOPOLYSILOXANES  
 692 DIORGANOPOLYSILOXANE  
      (DIORGANOPOLYSILOXANE OR DIORGANOPOLYSILOXANES)  
 675051 POLY  
      2 POLIES  
 675052 POLY  
      (POLY OR POLIES)  
 59152 OXY  
      13 OXIES  
 59164 OXY  
      (OXY OR OXIES)  
 3005 DIMETHYLSILYLENE  
      11 DIMETHYLSILYLENES  
 3007 DIMETHYLSILYLENE  
      (DIMETHYLSILYLENE OR DIMETHYLSILYLENES)  
 1733 POLY (W) OXY (W) DIMETHYLSILYLENE  
      7 POLYOXYDIMETHYLSILYLENE  
 6503 PDMS  
 12874 POLYDIMETHYLSILOXANE  
      966 POLYDIMETHYLSILOXANES  
 13338 POLYDIMETHYLSILOXANE  
      (POLYDIMETHYLSILOXANE OR POLYDIMETHYLSILOXANES)  
 675051 POLY  
      2 POLIES  
 675052 POLY  
      (POLY OR POLIES)  
 12648 DIMETHYLSILOXANE  
      1419 DIMETHYLSILOXANES  
 13343 DIMETHYLSILOXANE  
      (DIMETHYLSILOXANE OR DIMETHYLSILOXANES)  
 8119 POLY (W) DIMETHYLSILOXANE  
 L8 108666 SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSILOX  
      ANE OR POLYORGANOSILOXANE OR ORGANOPOLYSILOXANE OR POLYDIORGANOS  
      ILOXANE OR DIORGANOPOLYSILOXANE OR POLY (W) OXY (W) DIMETHYLSILYL  
      ENE OR POLYOXYDIMETHYLSILYLENE OR PDMS OR POLYDIMETHYLSILOXANE  
      OR POLY (W) DIMETHYLSILOXANE

=> d his

(FILE 'HOME' ENTERED AT 18:01:46 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED  
 L2 36 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006

L3 37 S L2  
 L4 68951 S POLYIMIDE  
 L5 24 S L3 (L) L4  
 L6 232490 S EPOXY  
 L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO  
 L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI

=> s L7 (L) L8

L9 1014 L7 (L) L8

=> s aminoalkyl

11795 AMINOALKYL

11 AMINOALKYLS  
L10 11802 AMINOALKYL  
(AMINOALKYL OR AMINOALKYLS)

=> s l10 (w) L8  
L11 28 L10 (W) L8

=> s L9 or L11  
L12 1014 L9 OR L11

=> d his

(FILE 'HOME' ENTERED AT 18:01:46 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED  
L2 36 S L1 SSS FULL

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L3 37 S L2  
L4 68951 S POLYIMIDE  
L5 24 S L3 (L) L4  
L6 232490 S EPOXY  
L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO  
L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI  
L9 1014 S L7 (L) L8  
L10 11802 S AMINOALKYL  
L11 28 S L10 (W) L8  
L12 1014 S L9 OR L11

=> s L24 and L12

L24 NOT FOUND

The L-number entered could not be found. To see the definition  
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l5 and L 12  
1500344 L  
1405474 12  
792 L 12  
(L(W)12)  
L13 0 L5 AND L 12

=> s anhydride or dianhydride  
205930 ANHYDRIDE  
32396 ANHYDRIDES  
216354 ANHYDRIDE  
(ANHYDRIDE OR ANHYDRIDES)  
20449 DIANHYDRIDE  
3575 DIANHYDRIDES  
21479 DIANHYDRIDE  
(DIANHYDRIDE OR DIANHYDRIDES)  
L14 230208 ANHYDRIDE OR DIANHYDRIDE

=> s L14 (L) L8  
L15 1645 L14 (L) L8

=> s Silicone (w) acid (w) dianhydride  
100147 SILICONE  
65367 SILICONES  
137806 SILICONE  
(SILICONE OR SILICONES)  
4192472 ACID  
1535179 ACIDS

4685509 ACID

(ACID OR ACIDS)

20449 DIANHYDRIDE

3575 DIANHYDRIDES

21479 DIANHYDRIDE

(DIANHYDRIDE OR DIANHYDRIDES)

L16 2 SILICONE (W) ACID (W) DIANHYDRIDE

=> s l15 or L16

L17 1646 L15 OR L16

=> d his

(FILE 'HOME' ENTERED AT 18:01:46 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED

L2 36 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006

L3 37 S L2

L4 68951 S POLYIMIDE

L5 24 S L3 (L) L4

L6 232490 S EPOXY

L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO

L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI

L9 1014 S L7 (L) L8

L10 11802 S AMINOALKYL

L11 28 S L10 (W) L8

L12 1014 S L9 OR L11

L13 0 S L5 AND L 12

L14 230208 S ANHYDRIDE OR DIANHYDRIDE

L15 1645 S L14 (L) L8

L16 2 S SILICONE (W) ACID (W) DIANHYDRIDE

L17 1646 S L15 OR L16

=> s l5 and L17

L18 5 L5 AND L17

=> s l5 and L12

L19 1 L5 AND L12

=> s l18 or L19

L20 5 L18 OR L19

=> s L6 and L20

L21 3 L6 AND L20



=> d his

(FILE 'HOME' ENTERED AT 18:01:46 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED  
L2 36 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006

L3 37 S L2  
L4 68951 S POLYIMIDE  
L5 24 S L3 (L) L4  
L6 232490 S EPOXY  
L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO  
L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI  
L9 1014 S L7 (L) L8  
L10 11802 S AMINOALKYL  
L11 28 S L10 (W) L8  
L12 1014 S L9 OR L11  
L13 0 S L5 AND L 12  
L14 230208 S ANHYDRIDE OR DIANHYDRIDE  
L15 1645 S L14 (L) L8  
L16 2 S SILICONE (W) ACID (W) DIANHYDRIDE  
L17 1646 S L15 OR L16  
L18 5 S L5 AND L17  
L19 1 S L5 AND L12  
L20 5 S L18 OR L19  
L21 3 S L6 AND L20

=> d L21 1-3 ibib so ab hitstr

L21 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:842308 CAPLUS <<LOGINID::20060816>>  
DOCUMENT NUMBER: 141:350860  
TITLE: Imidazole and epoxy compound-containing  
polyimide resin composition and adhesive film prepared  
thereby  
INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Morita, Moritsugu  
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2004285284	A2	20041014	JP 2003-81782	20030325
PRIORITY APPLN. INFO.:			JP 2003-81782	20030325

SO Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF

AB A resin composition with high retention stability and heat resistance is composed of imidazole compds. having m.p. and decomposition temperature >235°, epoxy compds. containing ≥3 glycidyl groups, polyimides, and, optionally, organic or inorg. fillers. The above composition can be laminated on one side or both sides of a heat-resistant film to obtain adhesive films. Thus, a polyimide resin prepared from 1,3-bis(3-(3-aminophenoxy)phenoxy)benzene, NH<sub>2</sub>-terminated polydimethylsiloxane (BY 16 853U), ethylene glycol bis trimellitic dianhydride, and oxy-4,4'-diphthalic dianhydride was mixed with an imidazole compound (2MAOK PW), an epoxy (VG 3101), and silica filler (1 FX)

to receive a composition, which was cast coated on a PET film (A 31), cured, and peeled off to obtain an adhesive film.

IT 709616-71-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (imidazole and epoxy compound-containing polyimide resin composition for adhesive film)

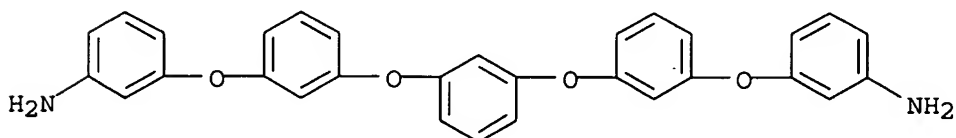
RN 709616-71-7 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

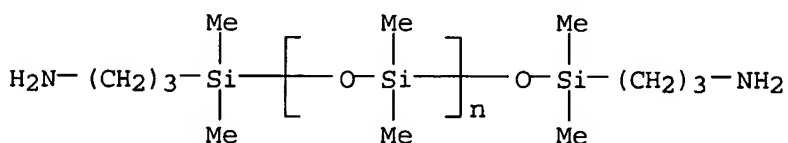


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

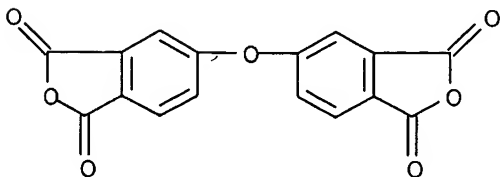
CCI PMS



CM 3

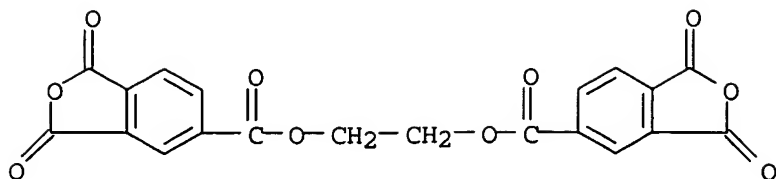
CRN 1823-59-2

CMF C16 H6 O7



CM 4

CRN 1732-96-3  
CMF C20 H10 O10

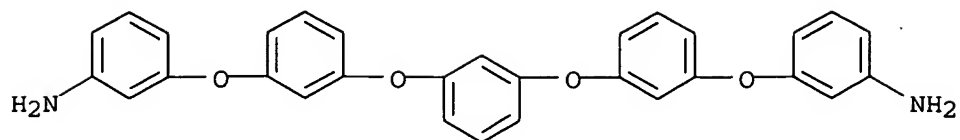


L21 ANSWER 2 OF 3/ CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:529830 CAPLUS <<LOGINID::20060816>>  
DOCUMENT NUMBER: 141:72640  
TITLE: Polyimide composition containing epoxy  
compound and film adhesive made of the composition  
INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Naruse, Isao;  
Kinoshita, Hitoshi; Fujieda, Nobuhiko; Morita,  
Moritsugu  
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004182804	A2	20040702	JP 2002-349636	20021202

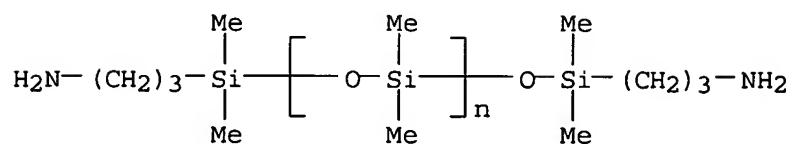
PRIORITY APPLN. INFO.: JP 2002-349636 20021202  
SO Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
AB The composition contains 100 parts of a polyimide and 1-100 parts  
1,1,1-[p-[2''-(4'''-glycidyoxyphenyl)methylethyl]phenyl]bis(p-  
glycidyoxyphenyl)ethane (I). The film adhesive is that made of the  
composition or made of a film substrate or metal foil and the composition layer  
on  
≥1 side. Thus, 15.00:43.44:18.49:8.15 1,3-bis[3-(3-  
aminophenoxy)phenoxy]benzene-α,ω-bis(3-aminopropyl)  
polydimethylsiloxane (BY 16-853U)-oxy-4,4'-diphthalic  
dianhydride-ethylene glycol bistrimellitate dianhydride  
copolymer 100, I (VG 3101) 20, and an imidazole (2MAOK-PW) 1 part were  
mixed, cast on a PET film, and cured to give the adhesive film after  
removal of the PET film. Then, 2 Si chips were laminated through the  
film, pressed at 200° for 1 s, and heated at 180° without  
load for 3 h to give a test piece showing shear strength 7 MPa.  
IT 709616-71-7P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(polyimide composition containing epoxy compound for film  
adhesive for semiconductor device fabrication)  
RN 709616-71-7 CAPLUS  
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl  
ester, polymer with α-[(3-aminopropyl)dimethylsilyl]-ω-[[[(3-  
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],  
5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-  
phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CRN 500577-28-6  
CMF C30 H24 N2 O4



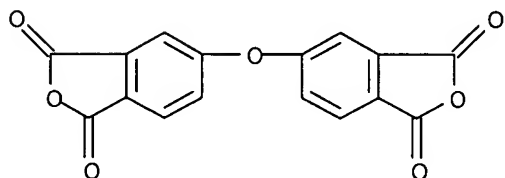
CM 2

CRN 97917-34-5  
CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
CCI PMS



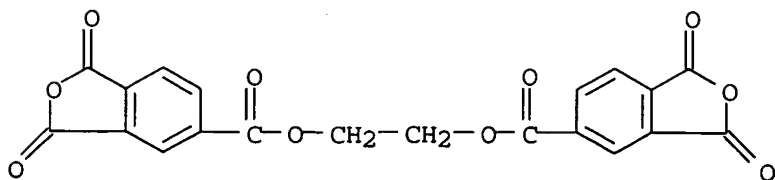
CM 3

CRN 1823-59-2  
CMF C16 H6 O7



CM 4

CRN 1732-96-3  
CMF C20 H10 O10



ACCESSION NUMBER: 2003:972122 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 140:28460  
 TITLE: Adhesive resins and film adhesives for bonding semiconductor devices  
 INVENTOR(S): Kinoshita, Jin; Morita, Moritsugu; Mori, Minehiro; Kodama, Yoichi  
 PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102049	A1	20031211	WO 2003-JP6776	20030529
W: CN, KR, PH, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004010865	A2	20040115	JP 2002-170216	20020611
EP 1508584	A1	20050223	EP 2003-733169	20030529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2005165196	A1	20050728	US 2003-512064	20030529
CN 1649936	A	20050803	CN 2003-809786	20030529
JP 2004051970	A2	20040219	JP 2003-153660	20030530
PRIORITY APPLN. INFO.:			JP 2002-156705	A 20020530
			JP 2002-170216	A 20020611
			WO 2003-JP6776	W 20030529

SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2

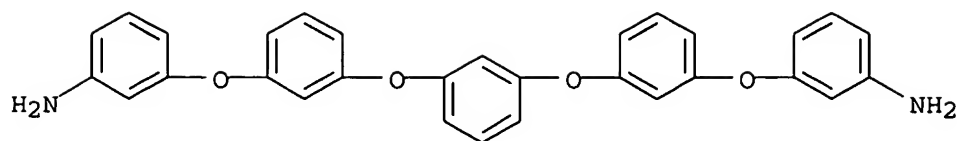
AB The adhesive resins contain a polyimide resin prepared by reacting a diamine component containing H<sub>2</sub>N(C<sub>6</sub>H<sub>4</sub>O)<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> as essential component and an amino-terminated silicone with tetracarboxylic acid dianhydrides, and/or a silicone acid dianhydride. Film adhesives made by using the adhesive resin preferably together with a thermosetting resin (e.g., epoxy resin), and, if necessary, an inorg. filler are excellent in low-temperature adhesion, resistance to moisture absorption, heat resistance, and workability in adhesive bonding and are favorably usable as semiconductor-mounting materials for bonding semiconductor devices to substrates.

IT 578730-72-0P 632330-97-3P 632330-98-4P  
 632330-99-5P 632331-00-1P 632331-01-2P  
 632331-02-3P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (heat- and moisture-resistant polyimide adhesives and film adhesives for semiconductor devices)

RN 578730-72-0 CAPLUS  
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
 (CA INDEX NAME)

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CRN 500577-28-6  
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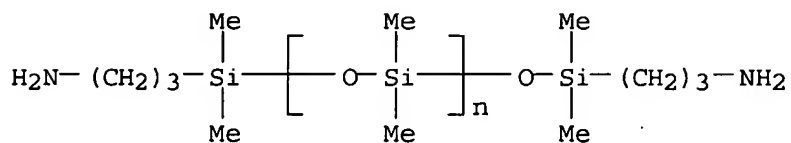


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

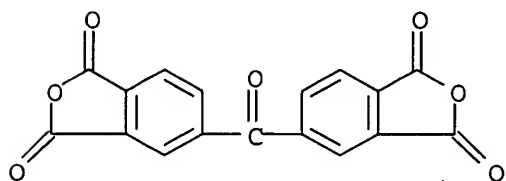
CCI PMS



CM 3

CRN 2421-28-5

CMF C17 H6 O7



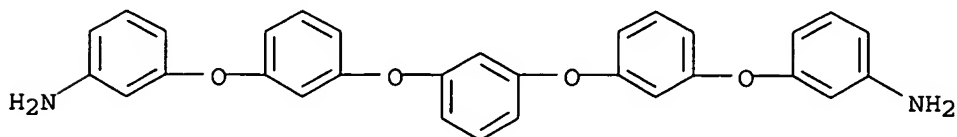
RN 632330-97-3 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with α-[(3-aminopropyl)dimethylsilyl]-ω-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

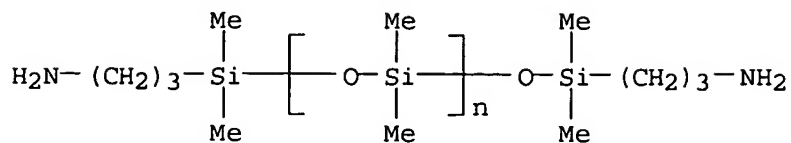
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CMF C30 H24 N2 O4



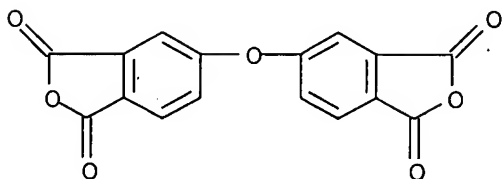
CM 2

CRN 97917-34-5  
 CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
 CCI PMS



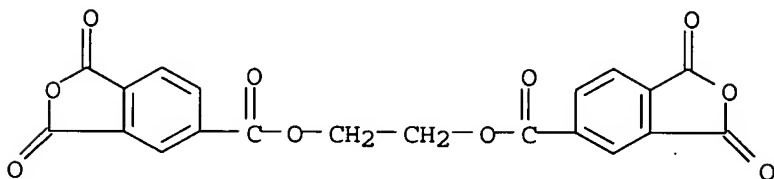
CM 3

CRN 1823-59-2  
 CMF C16 H6 O7



CM 4

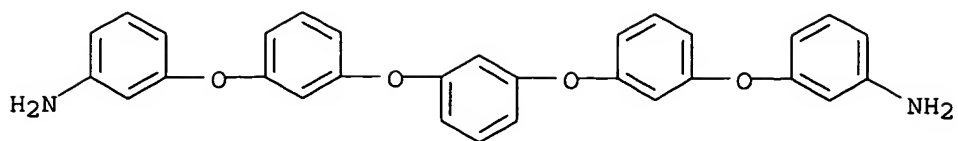
CRN 1732-96-3  
 CMF C20 H10 O10



RN 632330-98-4 CAPLUS  
 CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with  
 $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]],  
 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6  
 CMF C30 H24 N2 O4

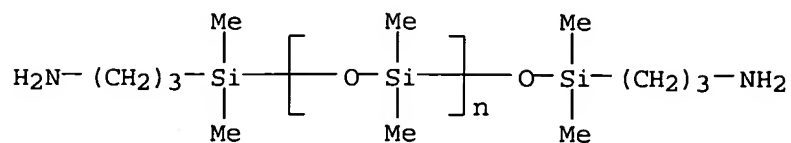


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

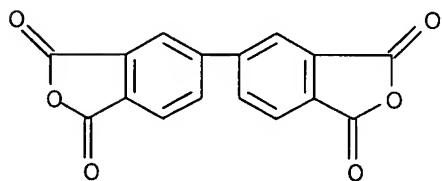
CCI PMS



CM 3

CRN 2420-87-3

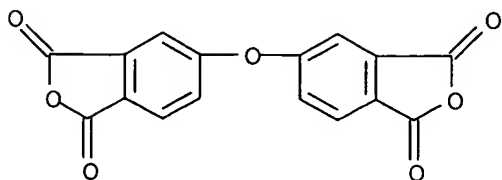
CMF C16 H6 O6



CM 4

CRN 1823-59-2

CMF C16 H6 O7



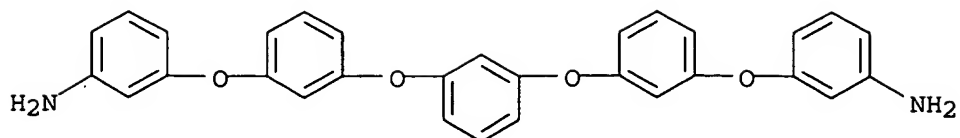
RN 632330-99-5 CAPLUS

CN Benzenamine, 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis-, polymer with α-[(1,3-dihydro-1,3-dioxo-5-isobenzofuranyl)dimethylsilyl]-ω-[[[(1,3-dihydro-1,3-dioxo-5-isobenzofuranyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] (9CI) (CA INDEX NAME)

CM 1

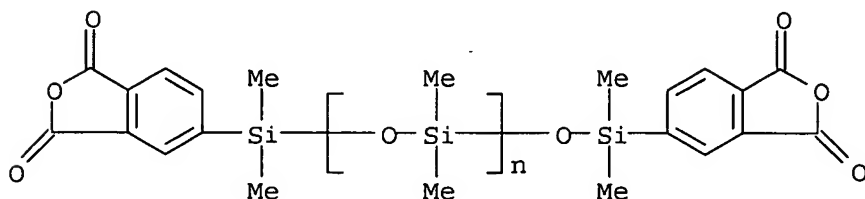


CRN 500577-28-6  
CMF C30 H24 N2 O4



CM 2

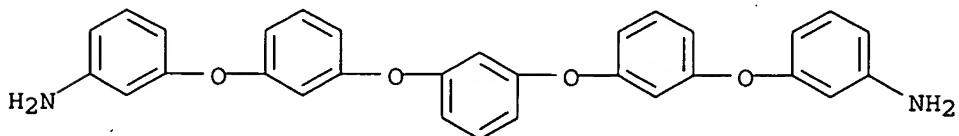
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CMF (C2 H6 O Si)<sub>n</sub> C20 H18 O7 Si2  
CCI PMS



RN 632331-00-1 CAPLUS  
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
(CA INDEX NAME)

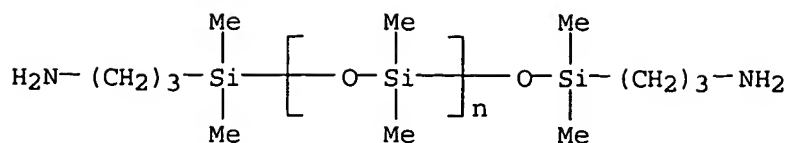
CM 1

CRN 500577-28-6  
CMF C30 H24 N2 O4



CM 2

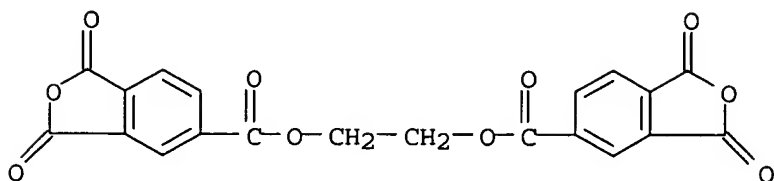
CRN 97917-34-5  
CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
CCI PMS



CM 3

CRN 1732-96-3

CMF C20 H10 O10



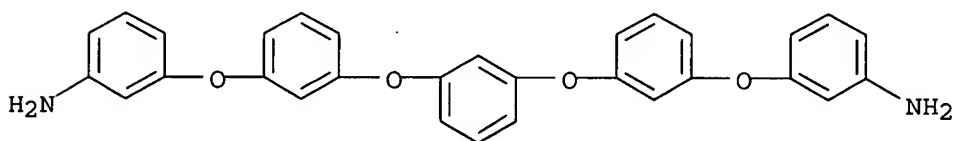
RN 632331-01-2 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis-, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
(CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

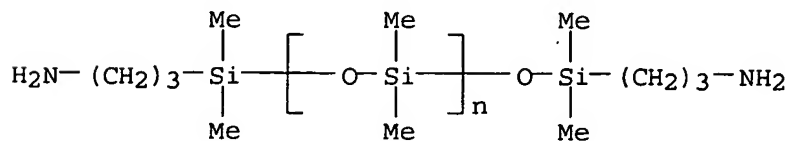


CM 2

CRN 97917-34-5

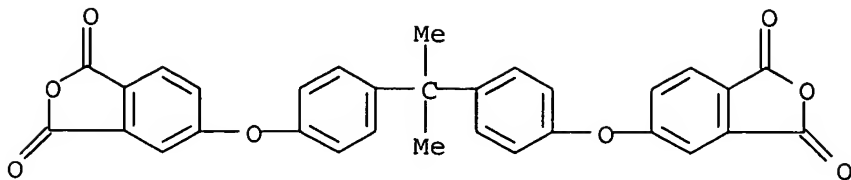
CMF  $(\text{C}_2 \text{H}_6 \text{O Si})_n \text{C}_{10} \text{H}_{28} \text{N}_2 \text{O Si}_2$

CCI PMS



CM 3

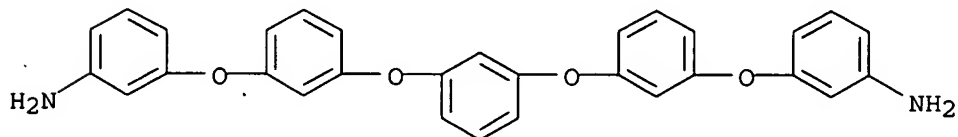
CRN 38103-06-9  
CMF C31 H20 O8



RN 632331-02-3 CAPLUS  
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

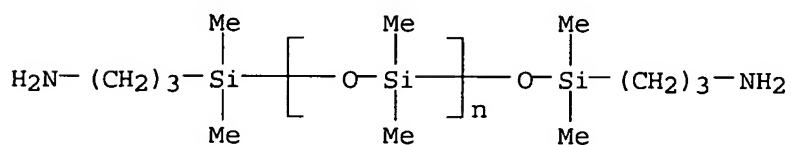
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CRN 500577-28-6  
CMF C30 H24 N2 O4



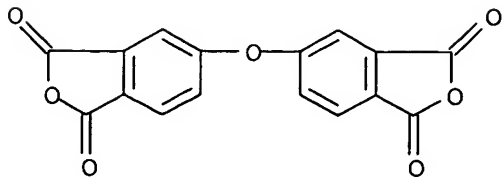
CM 2

CRN 97917-34-5  
CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
CCI PMS



CM 3

CRN 1823-59-2  
CMF C16 H6 O7



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 18:01:46 ON 16 AUG 2006)

FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED

L2 36 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006

L3 37 S L2

L4 68951 S POLYIMIDE

L5 24 S L3 (L) L4

L6 232490 S EPOXY

L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO

L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI

L9 1014 S L7 (L) L8

L10 11802 S AMINOALKYL

L11 28 S L10 (W) L8

L12 1014 S L9 OR L11

L13 0 S L5 AND L 12

L14 230208 S ANHYDRIDE OR DIANHYDRIDE

L15 1645 S L14 (L) L8

L16 2 S SILICONE (W) ACID (W) DIANHYDRIDE

L17 1646 S L15 OR L16

L18 5 S L5 AND L17

L19 1 S L5 AND L12

L20 5 S L18 OR L19

L21 3 S L6 AND L20

=> d L20 1-5 ibib so ab histr

'HISTR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB

ALL ----- BIB, AB, IND, RE

APPS ----- AI, PRAI

BIB ----- AN, plus Bibliographic Data and PI table (default)

CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data

CLASS ----- IPC, NCL, ECLA, FTERM

DALL ----- ALL, delimited (end of each field identified)

DMAX ----- MAX, delimited for post-processing

FAM ----- AN, PI and PRAI in table, plus Patent Family data

FBIB ----- AN, BIB, plus Patent FAM

IND ----- Indexing data

IPC ----- International Patent Classifications

MAX ----- ALL, plus Patent FAM, RE

PATS ----- PI, SO

SAM ----- CC, SX, TI, ST, IT

SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
SCAN must be entered on the same line as the DISPLAY,  
e.g., D SCAN or DISPLAY SCAN)

STD ----- BIB, CLASS

IABS ----- ABS, indented with text labels

IALL ----- ALL, indented with text labels

IBIB ----- BIB, indented with text labels

IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
                   containing hit terms  
 HITRN ----- HIT RN and its text modification  
 HITSTR ----- HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 HITSEQ ----- HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.  
 ENTER DISPLAY FORMAT (BIB):ibib

L20 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:842308 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 141:350860  
 TITLE: Imidazole and epoxy compound-containing polyimide resin composition and adhesive film prepared thereby  
 INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Morita, Moritsugu  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
           CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004285284	A2	20041014	JP 2003-81782	20030325
PRIORITY APPLN. INFO.:			JP 2003-81782	20030325

L20 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:778996 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 141:278329  
 TITLE: Manufacture of polyimide-polysiloxane with reduced amount of volatile cyclic siloxane  
 INVENTOR(S): Kodama, Yoichi; Naruse, Isao; Kinoshita, Hitoshi; Morita, Moritsugu  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004263058	A2	20040924	JP 2003-54236	20030228
PRIORITY APPLN. INFO.:			JP 2003-54236	20030228

L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:529830 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 141:72640  
 TITLE: Polyimide composition containing epoxy compound and film adhesive made of the composition  
 INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Naruse, Isao; Kinoshita, Hitoshi; Fujieda, Nobuhiko; Morita, Moritsugu  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004182804	A2	20040702	JP 2002-349636	20021202
PRIORITY APPLN. INFO.:			JP 2002-349636	20021202

L20 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:972122 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 140:28460  
 TITLE: Adhesive resins and film adhesives for bonding semiconductor devices  
 INVENTOR(S): Kinoshita, Jin; Morita, Moritsugu; Mori, Minehiro; Kodama, Yoichi  
 PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102049	A1	20031211	WO 2003-JP6776	20030529
W: CN, KR, PH, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004010865	A2	20040115	JP 2002-170216	20020611
EP 1508584	A1	20050223	EP 2003-733169	20030529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2005165196	A1	20050728	US 2003-512064	20030529
CN 1649936	A	20050803	CN 2003-809786	20030529
JP 2004051970	A2	20040219	JP 2003-153660	20030530
PRIORITY APPLN. INFO.:			JP 2002-156705	A 20020530
			JP 2002-170216	A 20020611

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:646649 CAPLUS <<LOGINID::20060816>>  
DOCUMENT NUMBER: 139:181148  
TITLE: Metal-thermoplastic polyimide laminate with good  
low-temperature bondability and solder heat resistance  
INVENTOR(S): Kodama, Yoichi; Mori, Minehiro  
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003231208	A2	20030819	JP 2002-28244	20020205
PRIORITY APPLN. INFO.:			JP 2002-28244	20020205

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FILE 'REGISTRY' ENTERED AT 18:01:56 ON 16 AUG 2006

L1 STRUCTURE UPLOADED  
L2 36 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:02:28 ON 16 AUG 2006

L3 37 S L2  
L4 68951 S POLYIMIDE  
L5 24 S L3 (L) L4  
L6 232490 S EPOXY  
L7 76751 S AMINOFUNCTION## OR ((AMINE OR AMINO) (W) FUNCTION##) OR AMINO  
L8 108666 S SILICON# (W) (POLYMER OR OIL OR ELASTOMER OR FLUID) OR POLYSI  
L9 1014 S L7 (L) L8  
L10 11802 S AMINOALKYL  
L11 28 S L10 (W) L8  
L12 1014 S L9 OR L11  
L13 0 S L5 AND L 12  
L14 230208 S ANHYDRIDE OR DIANHYDRIDE  
L15 1645 S L14 (L) L8  
L16 2 S SILICONE (W) ACID (W) DIANHYDRIDE  
L17 1646 S L15 OR L16  
L18 5 S L5 AND L17  
L19 1 S L5 AND L12  
L20 5 S L18 OR L19  
L21 3 S L6 AND L20

=> d L20 1-5 ibib so ab hitstr

L20 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:842308 CAPLUS <<LOGINID::20060816>>  
DOCUMENT NUMBER: 141:350860  
TITLE: Imidazole and epoxy compound-containing polyimide  
resin composition and adhesive film prepared thereby  
INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Morita, Moritsugu  
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: Japanese  
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004285284	A2	20041014	JP 2003-81782	20030325
PRIORITY APPLN. INFO.:			JP 2003-81782	20030325

SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF

AB A resin composition with high retention stability and heat resistance is composed of imidazole compds. having m.p. and decomposition temperature >235°, epoxy compds. containing ≥3 glycidyl groups, polyimides, and, optionally, organic or inorg. fillers. The above composition can be laminated on one side or both sides of a heat-resistant film to obtain adhesive films. Thus, a polyimide resin prepared from 1,3-bis(3-(3-aminophenoxy)phenoxy)benzene, NH<sub>2</sub>-terminated polydimethylsiloxane (BY 16 853U), ethylene glycol bis trimellitic dianhydride, and oxy-4,4'-diphthalic dianhydride was mixed with an imidazole compound (2MAOK PW), an epoxy (VG 3101), and silica filler (1 FX) to receive a composition, which was cast coated on a PET film (A 31), cured, and peeled off to obtain an adhesive film.

IT 709616-71-7P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (imidazole and epoxy compound-containing polyimide resin composition for adhesive film)

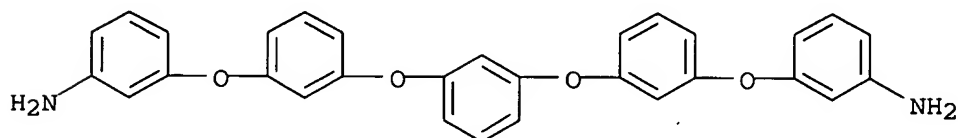
RN 709616-71-7 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with α-[(3-aminopropyl)dimethylsilyl]-ω-[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4



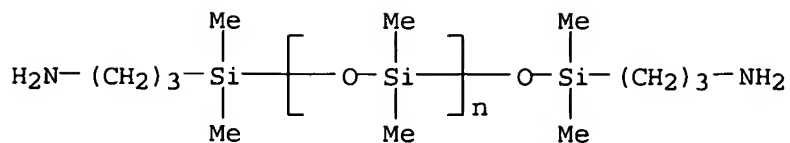
CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

CCI PMS

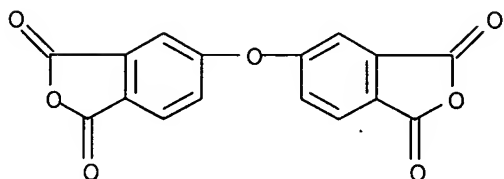




CM 3

CRN 1823-59-2

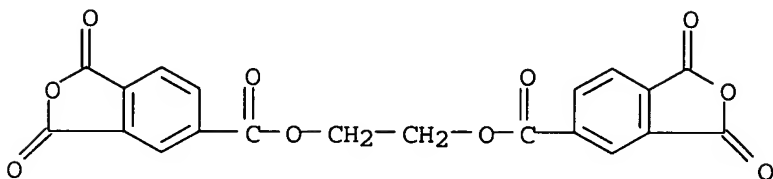
CMF C16 H6 O7



CM 4

CRN 1732-96-3

CMF C20 H10 O10



L20 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:778996 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 141:278329  
 TITLE: Manufacture of polyimide-polysiloxane with reduced amount of volatile cyclic siloxane  
 INVENTOR(S): Kodama, Yoichi; Naruse, Isao; Kinoshita, Hitoshi; Morita, Moritsugu  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004263058	A2	20040924	JP 2003-54236	20030228
PRIORITY APPLN. INFO.:			JP 2003-54236	20030228
SO Jpn. Kokai Tokkyo Koho, 8 pp.				
CODEN: JKXXAF				
AB The polyimide-polysiloxane, useful for film adhesive in				

semiconductor packaging process, is manufactured by the method involving polymerization of diamines containing diaminopolysiloxane and tetracarboxylic dianhydrides in removal of vaporized solvents from the system. Thus, 1,3-bis[3-(3-aminophenoxy)phenoxy]benzene 65.00, diaminopolysiloxane (BY 16-853U) 134.37, oxy-4,4'-diphthalic dianhydride 63.71, and ethylene glycol bistrimellitate dianhydride 28.09 g were polymerized in a mixture of 295.24 g N-methyl-2-pyrrolidone and 126.53 g mesitylene at 170-180° for 20 h, wherein 90% of the solvents were removed from the system, to give a polymer containing <5 ppm cyclic trimer and <5 ppm cyclic tetramer.

IT 709616-71-7P, 1,3-Bis[3-(3-aminophenoxy)phenoxy]benzene-BY  
16-853U-ethylene glycol bistrimellitate dianhydride  
-oxy-4,4'-diphthalic dianhydride copolymer  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(polyimide-polysiloxane with reduced amount of  
volatile cyclic siloxane prepared under removal of volatile solvents)

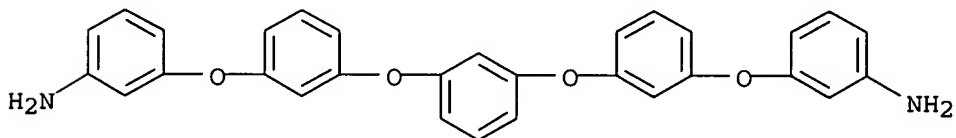
RN 709616-71-7 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl  
ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[3-  
aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],  
5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-  
phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

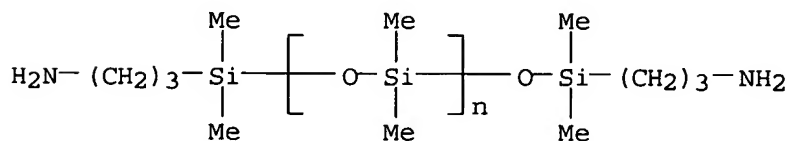


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

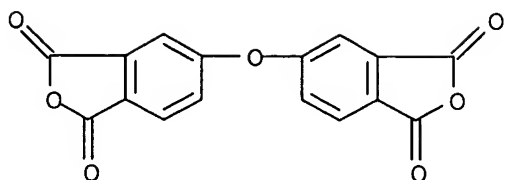
CCI PMS



CM 3

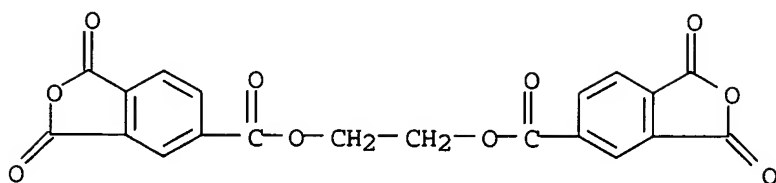
CRN 1823-59-2

CMF C16 H6 O7



CM 4

CRN 1732-96-3  
CMF C20 H10 O10



L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN.  
ACCESSION NUMBER: 2004:529830 CAPLUS <<LOGINID::20060816>>  
DOCUMENT NUMBER: 141:72640  
TITLE: Polyimide composition containing epoxy compound and film adhesive made of the composition  
INVENTOR(S): Kodama, Yoichi; Maruyama, Hiroshi; Naruse, Isao; Kinoshita, Hitoshi; Fujieda, Nobuhiko; Morita, Moritsugu  
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004182804	A2	20040702	JP 2002-349636	20021202
PRIORITY APPLN. INFO.:			JP 2002-349636	20021202

SO Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF

AB The composition contains 100 parts of a polyimide and 1-100 parts 1,1,1-[p-[2"-(4"'-glycidyoxyphenyl)methylethyl]phenyl]bis(p-glycidyoxyphenyl)ethane (I). The film adhesive is that made of the composition or made of a film substrate or metal foil and the composition layer on

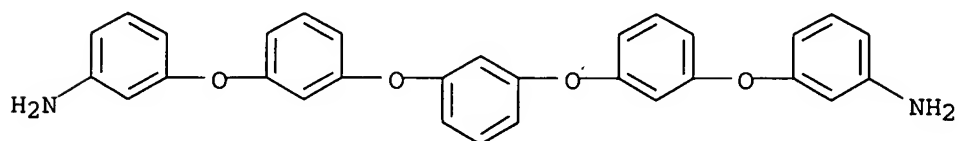
≥1 side. Thus, 15.00:43.44:18.49:8.15 1,3-bis[3-(3-aminophenoxy)phenoxy]benzene-α,ω-bis(3-aminopropyl) polydimethylsiloxane (BY 16-853U)-oxy-4,4'-diphthalic dianhydride-ethylene glycol bistrimellitate dianhydride copolymer 100, I (VG 3101) 20, and an imidazole (2MAOK-PW) 1 part were mixed, cast on a PET film, and cured to give the adhesive film after removal of the PET film. Then, 2 Si chips were laminated through the film, pressed at 200° for 1 s, and heated at 180° without load for 3 h to give a test piece showing shear strength 7 MPa.

IT 709616-71-7P

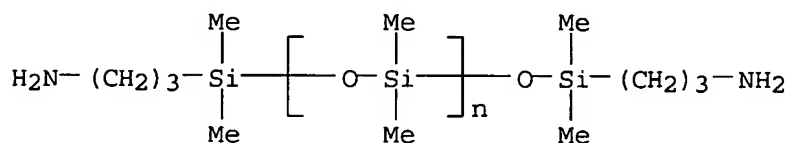
(polyimide composition containing epoxy compound for film adhesive for semiconductor device fabrication)

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[ (3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME).

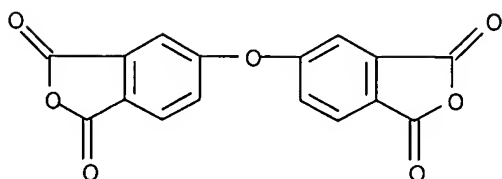
CMF C30 H24 N2 O4



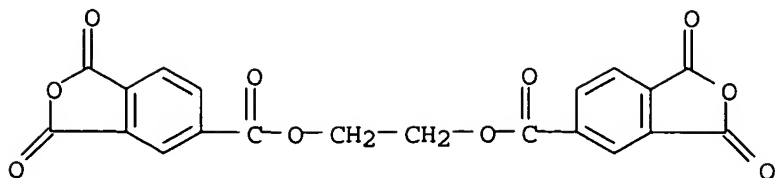
CCI PMS



CMF C16 H6 O7



CMF C20 H10 O10



L20 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:972122 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 140:28460  
 TITLE: Adhesive resins and film adhesives for bonding semiconductor devices  
 INVENTOR(S): Kinoshita, Jin; Morita, Moritsugu; Mori, Minehiro; Kodama, Yoichi  
 PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102049	A1	20031211	WO 2003-JP6776	20030529
W: CN, KR, PH, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004010865	A2	20040115	JP 2002-170216	20020611
EP 1508584	A1	20050223	EP 2003-733169	20030529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
US 2005165196	A1	20050728	US 2003-512064	20030529
CN 1649936	A	20050803	CN 2003-809786	20030529
JP 2004051970	A2	20040219	JP 2003-153660	20030530
PRIORITY APPLN. INFO.:				
			JP 2002-156705	A 20020530
			JP 2002-170216	A 20020611
			WO 2003-JP6776	W 20030529

SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2

AB The adhesive resins contain a polyimide resin prepared by reacting a diamine component containing H<sub>2</sub>N(C<sub>6</sub>H<sub>4</sub>O)<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> as essential component and an amino-terminated silicone with tetracarboxylic acid dianhydrides, and/or a silicone acid dianhydride. Film adhesives made by using the adhesive resin preferably together with a thermosetting resin (e.g., epoxy resin), and, if necessary, an inorg. filler are excellent in low-temperature adhesion, resistance to moisture absorption, heat resistance, and workability in adhesive bonding and are favorably usable as semiconductor-mounting materials for bonding semiconductor devices to substrates.

IT 578730-72-0P 632330-97-3P 632330-98-4P  
 632330-99-5P 632331-00-1P 632331-01-2P  
 632331-02-3P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (heat- and moisture-resistant polyimide adhesives and film adhesives for semiconductor devices)

RN 578730-72-0 CAPLUS

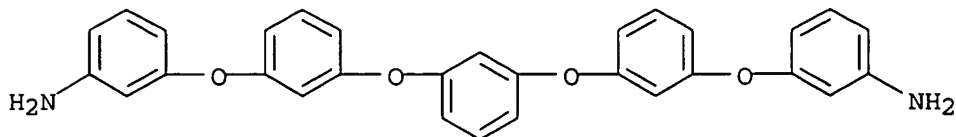
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with

$\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
(CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

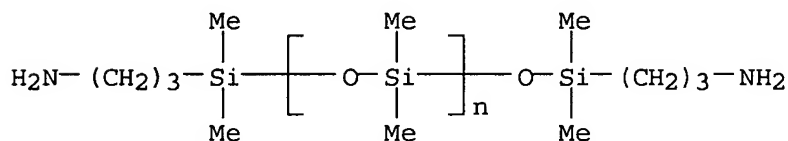


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

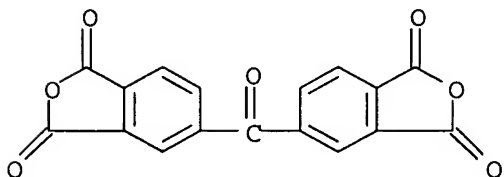
CCI PMS



CM 3

CRN 2421-28-5

CMF C17 H6 O7



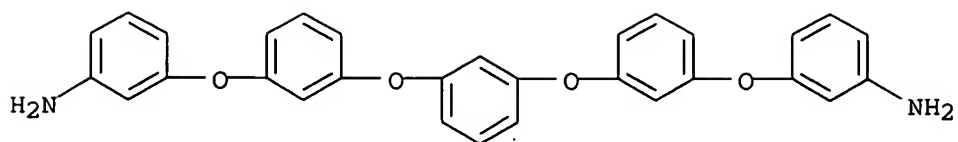
RN 632330-97-3 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]], 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

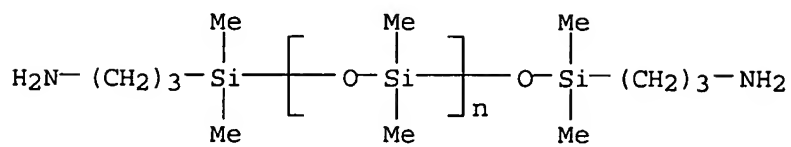


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

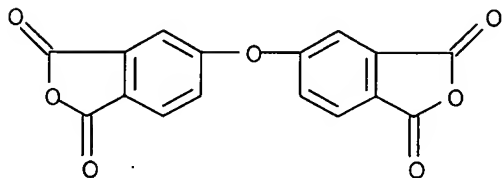
CCI PMS



CM 3

CRN 1823-59-2

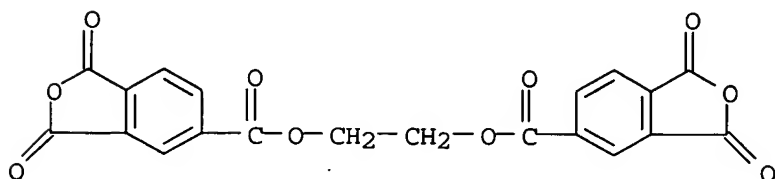
CMF C16 H6 O7



CM 4

CRN 1732-96-3

CMF C20 H10 O10



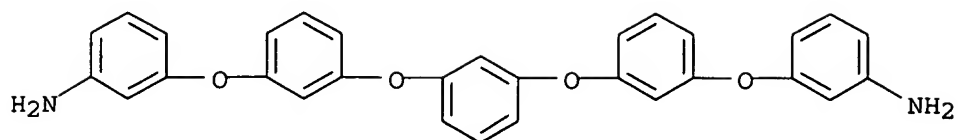
RN 632330-98-4 CAPLUS

CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with  
 $\alpha$ -[[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],  
 5,5'-oxybis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

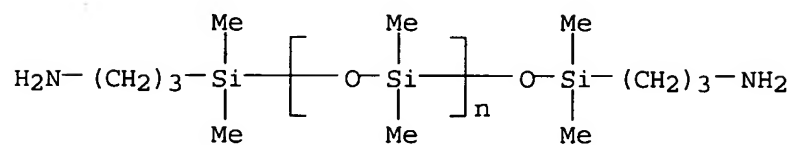


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

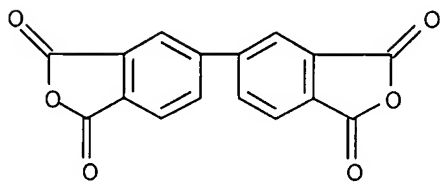
CCI PMS



CM 3

CRN 2420-87-3

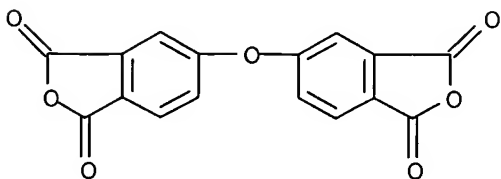
CMF C16 H6 O6



CM 4

CRN 1823-59-2

CMF C16 H6 O7

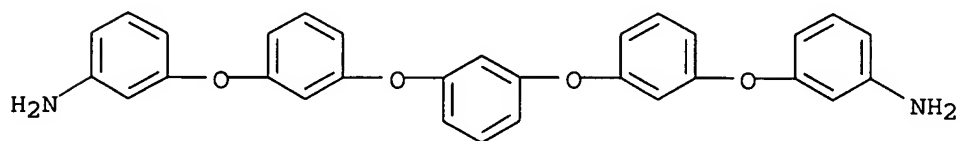




RN 632330-99-5 CAPLUS  
 CN Benzenamine, 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis-, polymer with  $\alpha$ -[(1,3-dihydro-1,3-dioxo-5-isobenzofuranyl)dimethylsilyl]- $\omega$ -[(1,3-dihydro-1,3-dioxo-5-isobenzofuranyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA INDEX NAME)

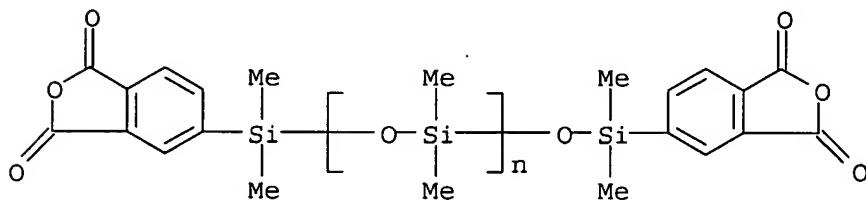
CM 1

CRN 500577-28-6  
 CMF C30 H24 N2 O4



CM 2

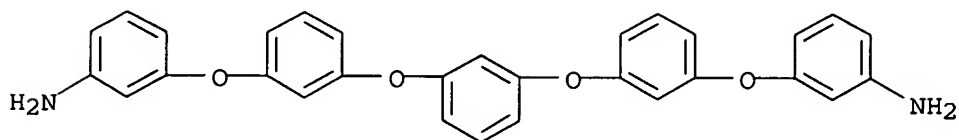
CRN 137178-97-3  
 CMF (C2 H6 O Si)<sub>n</sub> C20 H18 O7 Si2  
 CCI PMS



RN 632331-00-1 CAPLUS  
 CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

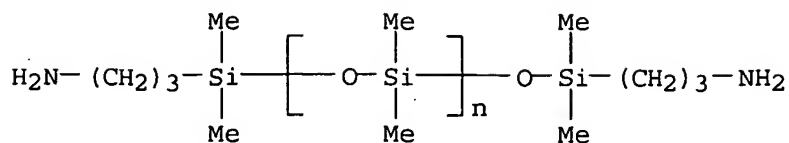
CRN 500577-28-6  
 CMF C30 H24 N2 O4



CM 2

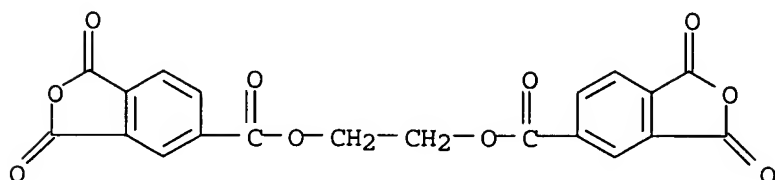
CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
 CCI PMS



CM 3

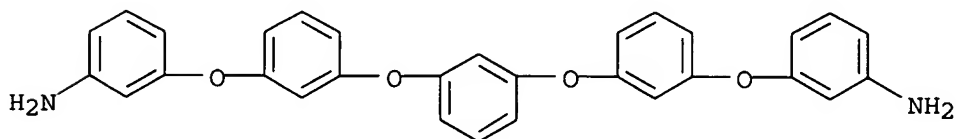
CRN 1732-96-3  
 CMF C20 H10 O10



RN 632331-01-2 CAPLUS  
 CN 1,3-Isobenzofurandione, 5,5'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis-, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
 (CA INDEX NAME)

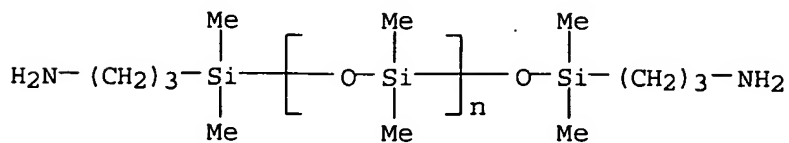
CM 1

CRN 500577-28-6  
 CMF C30 H24 N2 O4



CM 2

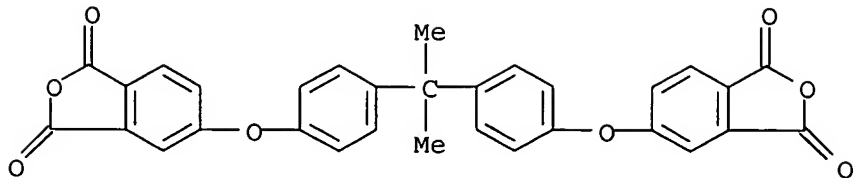
CRN 97917-34-5  
 CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
 CCI PMS



CM 3

CRN 38103-06-9

CMF C31 H20 O8



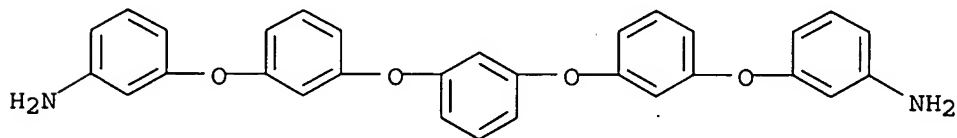
RN 632331-02-3 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[[(3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)]] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI) (CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

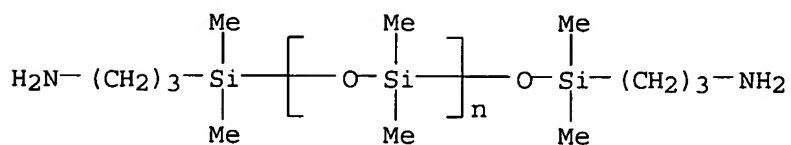


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

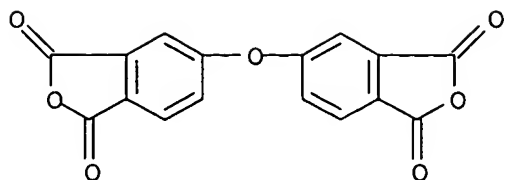
CCI PMS



CM 3

CRN 1823-59-2

CMF C16 H6 O7



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:646649 CAPLUS <<LOGINID::20060816>>  
 DOCUMENT NUMBER: 139:181148  
 TITLE: Metal-thermoplastic polyimide laminate with good low-temperature bondability and solder heat resistance  
 INVENTOR(S): Kodama, Yoichi; Mori, Minehiro  
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003231208	A2	20030819	JP 2002-28244	20020205
PRIORITY APPLN. INFO.:			JP 2002-28244	20020205

SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF

AB The laminate for semiconductor packages, etc., has a layer of thermoplastic polyimides prepared from diamines containing 1,3-bis(3-(3-aminophenoxy)phenoxy)benzene a,  $H_2NR_1SiR_3R_4(OSiR_5R_6)mR_2NH_2$  ( $R_1, R_2$  = divalent C1-4 aliphatic or aromatic;  $R_3-R_6$  = monovalent aliphatic or aromatic;

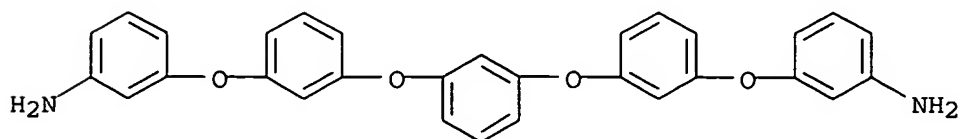
m = 1-20) b, and other diamines c mol and acid dianhydrides containing d mol of dianhydrides I ( $T = CO, COC_6H_4CO, OC_6H_4COC_6H_4O$ ) and e mol of other dianhydrides while satisfying  $(a + b)/(a + b + c) = 0.5-1.0$ ;  $0 < a/(a + b) < 1.0$ ;  $0 < d/(d + e) \leq 1.0$ ; and  $0.9 \leq (d + e)/(a + b + c) < 1.0$ .

Thus, 1,3-bis(3-(3-aminophenoxy)phenoxy)benzene 0.0100, BY 16-871EG (diaminosiloxane), and 3,3',4,4'-benzophenonetetracarboxylic dianhydride were reacted to give a polyamic acid solution, which was cast on SLP 18 (Cu foil) and heated to give a polyimide-Cu laminate. The laminate was press-bonded at 150° with another Cu foil to give a test piece showing 90°-peeling strength 1.52 kg/cm.

IT 500577-28-6DP, polymers with diaminosiloxanes and acid dianhydrides 578730-72-0P 578730-73-1P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (metal/thermoplastic polyimide-polysiloxane laminate with good low-temperature bondability and solder heat resistance)

RN 500577-28-6 CAPLUS

CN Benzenamine, 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis- (9CI) (CA INDEX NAME)



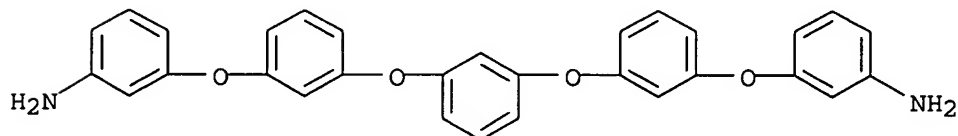
RN 578730-72-0 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with  
 $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and  
3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine], block (9CI)  
(CA INDEX NAME)

CM 1

CRN 500577-28-6

CMF C30 H24 N2 O4

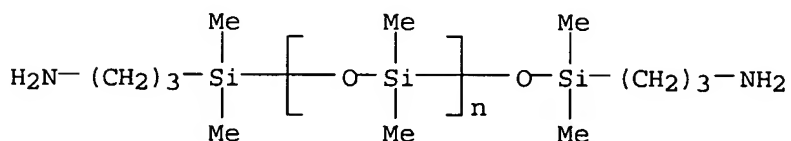


CM 2

CRN 97917-34-5

CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2

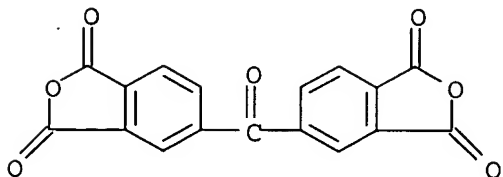
CCI PMS



CM 3

CRN 2421-28-5

CMF C17 H6 O7

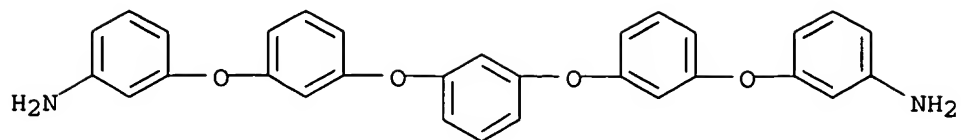


RN 578730-73-1 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl  
ester, polymer with  $\alpha$ -[(3-aminopropyl)dimethylsilyl]- $\omega$ -[[3-aminopropyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)],  
3,3'-[[1,1'-biphenyl]-4,4'-diylbis(oxy)]bis[benzenamine],  
5,5'-carbonylbis[1,3-isobenzofurandione] and 3,3'-[1,3-phenylenebis(oxy-3,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

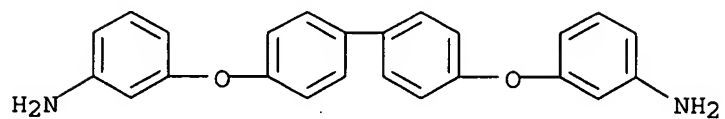
CM 1

CRN 500577-28-6  
CMF C30 H24 N2 O4



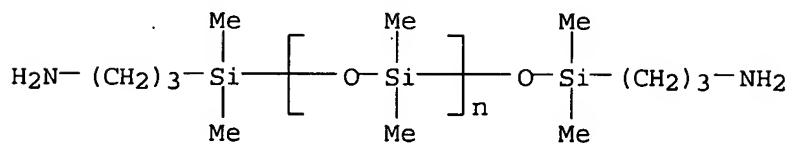
CM 2

CRN 105112-76-3  
CMF C24 H20 N2 O2



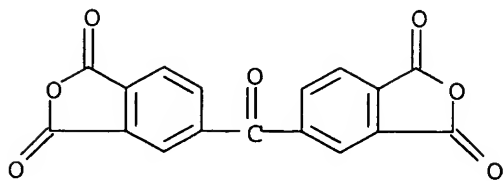
CM 3

CRN 97917-34-5  
CMF (C2 H6 O Si)<sub>n</sub> C10 H28 N2 O Si2  
CCI PMS



CM 4

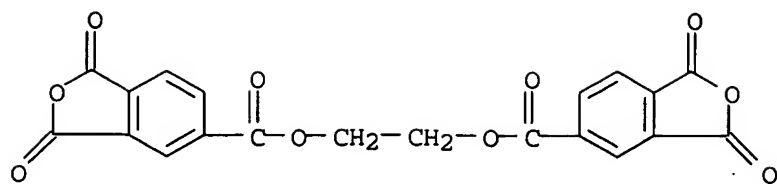
CRN 2421-28-5  
CMF C17 H6 O7



CM 5

CRN 1732-96-3

CMF C20 H10 O10



=> log y